

A METHOD OF EXTRACTING AND ISOLATING MINOR COMPONENTS FROM VEGETABLE OIL

ABSTRACT

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A process for the separation and recovery of minor components from vegetable oil such as palm oil. Esterified palm oil is subjected to molecular distillation giving a concentrate rich in minor components. The concentrate is then adsorbed to adsorbents such as normal phase silica gel, reversed phase (particularly C18) silica gel or neutral alumina
10 as well as polymer absorbents such as polyethylene glycol and polyacrylate polyalcohol. Minor components such as squalene, carotenes, tocopherols and sterols are then selectively desorbed, separated and recovered using solvents operating at isocratic conditions. The desorption of the said minor components are sped up by applying pressure of between 0.2 to 50 bar. By the same method, individual tocopherol isomers from palm oil can also be
15 separated and recovered.